EXHIBIT D



The Role of the Patent Examiner

Sue A. Purvis

Innovation and Outreach Coordinator Greater New York Region U.S. Patent and Trademark Office Department of Commerce

Outline

- My Career Path
- Role of a Patent Examiner
- Job / Responsibility of a Patent **Examiner**
- Tools of a Patent Examiner

Outreach in NYC



Page 5 of 27 PageID #:

United States Patents

- Grant of intellectual property right to exclude others from making, using, selling or importing
- Patent document describes how to make and use invention olncludes a "claim" setting forth the protected invention

History Of the US Patent System

Patent No x-1 (July 31, 1790)



The United States

To all to whom these Oresents shall come. Greeting.

Document 1-4

X000001 July 31, 1790

Hashington

Page 6 of 27 PageID #:

Whereas Samuel Hopkins of the bity of Philadelphia and State of Pensylvania hath discovered an Improvement, not known or used beforesuch Discovery, in the making of Cot ash and Ocarl ash by a new apparatus and Process; that is to say, in the making of Ocarl ash 1st by burning the raw Ashes in a Furnace, 2th by dispotering and boiling them when so burnt in Water, 3th by drawing off and settling the day, and it by boiling the day into batto which then are the true Parl ash; and also in the making of Oot ash by fluxing the Pearl ash so made as a foresaid; which Operation of burning the paw ashes in a Turnace, preparatory to their Difolution and boiling in water, is new, haves little Residuum; and produces a much great er quantity of Salt: These are therefore in pursuance of the act, entituled "An Act to promote the Orogreps of useful Arts", to grant to the said Tamuel Hopkins, his Heirs, administrators and afrigues, for the Term of fourteen Gears, the sole and exclusive Right and Liberty of using and vending to others the said Discovery, of burning they raw ashes previous to their being difsolved and boiled in Water, according to the true Intent and meaning. of the act aforesaid. In Testimony whereof Thave caused these Lellers tobiomade patient, and the deal of the United States tobe humanto apprete Given undurny Hand at the City of New York this thirty first Day of July in the Clear of our Lord one thousand seven hundred & Minety.

City of New York July 31 " 1790. -

I do hereby bertify that the foregoing Letters patent were delivered tome in pursuance of the act, entitalio " an act to promote the Progress of useful arts; that I have examined the same, and find them conformable to the said Net.

Signed by George Washington

Edm: Kandolph Attorney General for the United States.

History Of the US Patent System

- Act of 1790: examination administered by the Secretary of State with Secretary of War, Attorney General, & DoS Chief Clerk).
- Act of 1793: Changed to a registration system.
- Act of 1836: Reinstated examination, designated a Commissioner, used "novelty" as basis for patentability.
- Act of 1952: Currently in force; established and codified non-obviousness, made Patent Office part of the Commerce Department.

Recent History

- 1984 Reexamination proceedings
- 1992 Fully fee funded
- 1995 Term changed from 17 years to 20 years; established Provisional applications.
- 1999 AIPA: Pre Grant Publication, extension of term for Office delay
- 2011 AIA: First-to-file/prior users; fast track; post grant review; fee setting; satellite offices

What is the Role of Patent Examiner?

- Issue Valid Patents
 - Make appropriate objections
 - Make only reasonable rejections
 - Help applicant identify allowable subject matter
- Act as an advocate for the Public
 - o Ensure development of a clear and complete file wrapper record
 - o Patent prosecution before the Office should not be adversarial, instead it should be cooperative investigation between the Examiner and the Applicant, which ensures an Applicant receives a patent only for that which they are entitled to in accordance with Patent laws.

What is the Role of Patent Examiner? (cont.)

- To serve as advocate/protector of public interest with respect to intellectual property
- To provide direct service and assistance to customers from inside and outside the U.S. Patent & Trademark Office
- To serve as a judge on patentability with respect to inventions claimed in a patent application under conditions for patentability set forth in Title 35 of the United States Code

Congress and the USPTO

#: 91

- Congress passes the patent laws that govern all substantive and procedural functions of the USPTO
 - o 35 USC §§ 101 defines what is eligible to be patented
 - o 35 USC §§ 102 must be new
 - o 35 USC §§ 103 must be non-obvious
 - o 35 USC §§ 112 must be sufficiently described, enabled, with best mode disclosed

#: 92

Document 1-4

- **Reads and understands** the invention set forth in the specification
- Determines whether the application is adequate to define the metes and bounds of the claimed invention
- Determines the scope of the claims
- Searches existing technology for claimed invention
- Determines patentability of the claimed invention

What Does a Patent Examiner Do? (cont.)

- Writes an Office Action which identifies and analyzes all issues in the application pertinent to patentability of the claimed invention
- Responds completely to Applicant's reply
- Issues Notice of Allowance or Notice of **Abandonment**
- Ensures that all pertinent procedural steps necessary for obtaining a patent are complied with during prosecution of an application

What May an Examiner Do?

#: 94

- Advise on advantages of, and appropriate classification fields for, pre-examination search
- Advise on advantages of securing services of a competent patent attorney or agent
- Advise on Office fees and Office procedures in general
- Assist public in conducting a search, short of rendering patentability advice or opinion as to whether an application should be filed

An Examiner should be able to answer these questions about an application:

- What subject area is most related to Applicant's invention?
- What existing invention(s) did Applicant identify?
- What problem(s) did Applicant identify with existing inventions?
- How does Applicant propose to solve the problem(s)?
- How does Applicant implement the solution(s)?
- Do the claims incorporate Applicant's solution(s)?

Parts of a Patent Application

#: 96

- Title
- Abstract
- Background Of Invention
 - o A Field of Invention in which Applicant identifies the most relevant subject area to which his invention belongs.
 - A Description of Related Art used by Applicant to:
 - Identify existing relevant inventions.
 - Discuss any problems with these existing inventions.
- **Brief Summary Of Invention**
- Brief Description Of Drawings
- Detailed Description Of Invention
- Claims

How Much Detail is Needed?

#: 97

Document 1-4

- The Detailed Description must describe at least one specific embodiment or example of the invention.
- The claimed invention must encompass at least one disclosed embodiment.
- As you read the detailed description, be on the lookout for any parts relating to elements of the claimed invention that were not clear to you.
- Try to identify how Applicant implements solutions proposed for objectives/solutions.

The Claims

#: 98

- The Focus Must Begin And Remain On The Claims
- "The Invention Disclosed In Hiniker's Written Description May Be Outstanding In Its Field, But The Name Of The Game Is The Claim."
 - o In Re Hiniker Co., 150 F.3d 1362, 47 USPQ2d 1523 (Fed. Cir. 1998)

The Claims (cont.)

#: 99

- Patent Claims Are The Inventor's Attempt To Delineate, By Way Of A Single Sentence In The English Language, The Technology Which The Inventor Regards As His Or Her Invention.
- Claim language defines the metes and bounds of property protection desired (or the property boundaries).
- Patent Claims Provide Notice To The Public Regarding The Technology, Which Is Fenced Off Or Protected From Trespass.

The Claimed Invention

#: 100

- Analysis Begins With A Key Legal Question –
- What Is The Invention Claimed?
- "The First Inquiry Must Be Into Exactly What the Claims Define." - In Re Wilder, 429 F.2d 447, 166 U.S.P.Q. 545 (C.C.P.A. 1970)
- Do the claims make sense
 - o Grammatically?
 - o Logically?
 - o Technologically?
- Are there any terms you do not understand?
- Do you understand the concept of the claim?

The Claimed Invention (cont.)

- How would you summarize the claim?
- What are the essential features of the claim?
- How are the claimed elements described in the specification?

Sources of Law

#: 102

- There are three sources of Federal Law that correlate to the three branches of government:
 - o Statutory law consists of the acts passed by the legislature, i.e. the Legislative Branch
 - o Case law consists of the case decisions issued by the courts, i.e. the Judicial Branch
 - o Regulatory law consists of the regulations promulgated by agencies, i.e. the **Executive Branch**

#: 103

Statutes – Patent Laws passed by Congress

Regulations (Rules) - Patent Rules the USPTO has established and must follow except in extraordinary situations

Policy & Procedure - Detailed guidance regarding operations of the USPTO

Guidelines - Comprehensive analyses of Office guidelines on individual topics

Form Paragraphs - Prewritten templates that Examiners use to convey information to applicants and attorneys

MPEP - Roadmap

APPLICATION

(100-600)

EXAMINATION & PROSECUTION

(700-1400)

SPECIALIZED AREAS

(1500-2000)

PATENTABILITY, REEXAMINATION, INTERFERENCE, AND OTHER

(2100-2700)

APPENDIXES

PROCESS

PCT & OTHERS

HEAVY DUTY REFERENCE MATERIALS

LAWS, RULES & INDEX

Simplified Patent Examination Process

#: 105

Document 1-4

1. Examiner selects application from PALM docket in eDAN



2. Examiner reviews application, formulates search strategy, and performs prior art search









3. Examiner reviews prior art, applies art to application, and authors office action









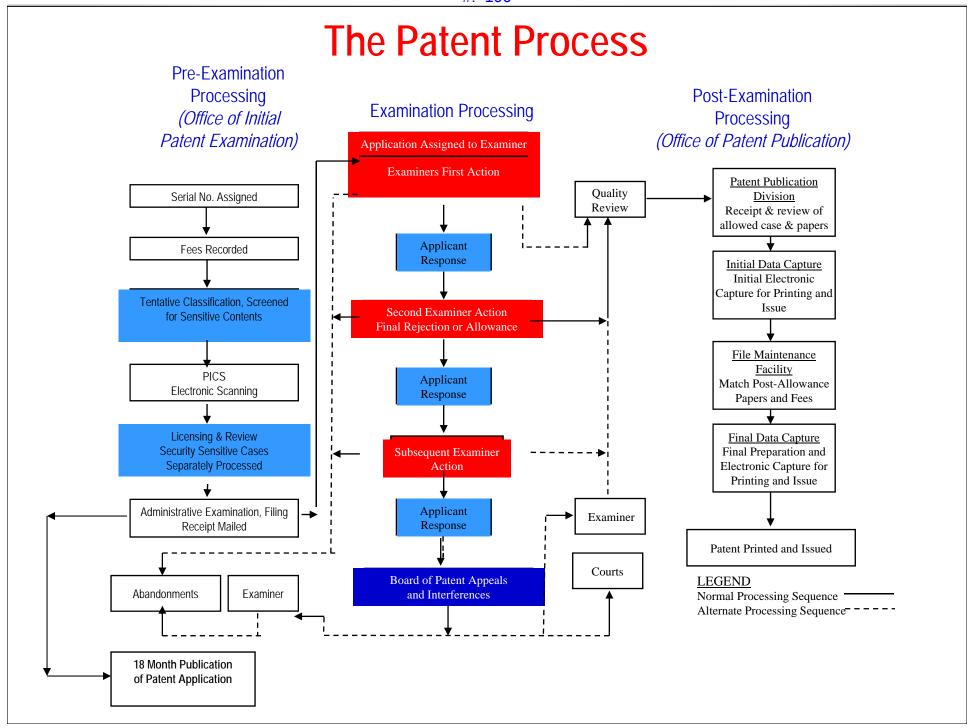




5. Office action is forwarded to mailing contractor and mailed to applicant



4. Office action is forwarded for review and signature (if necessary) then routed to TSS for recording in PALM



Thank You!

www.uspto.gov/cornell sue.purvis@uspto.gov